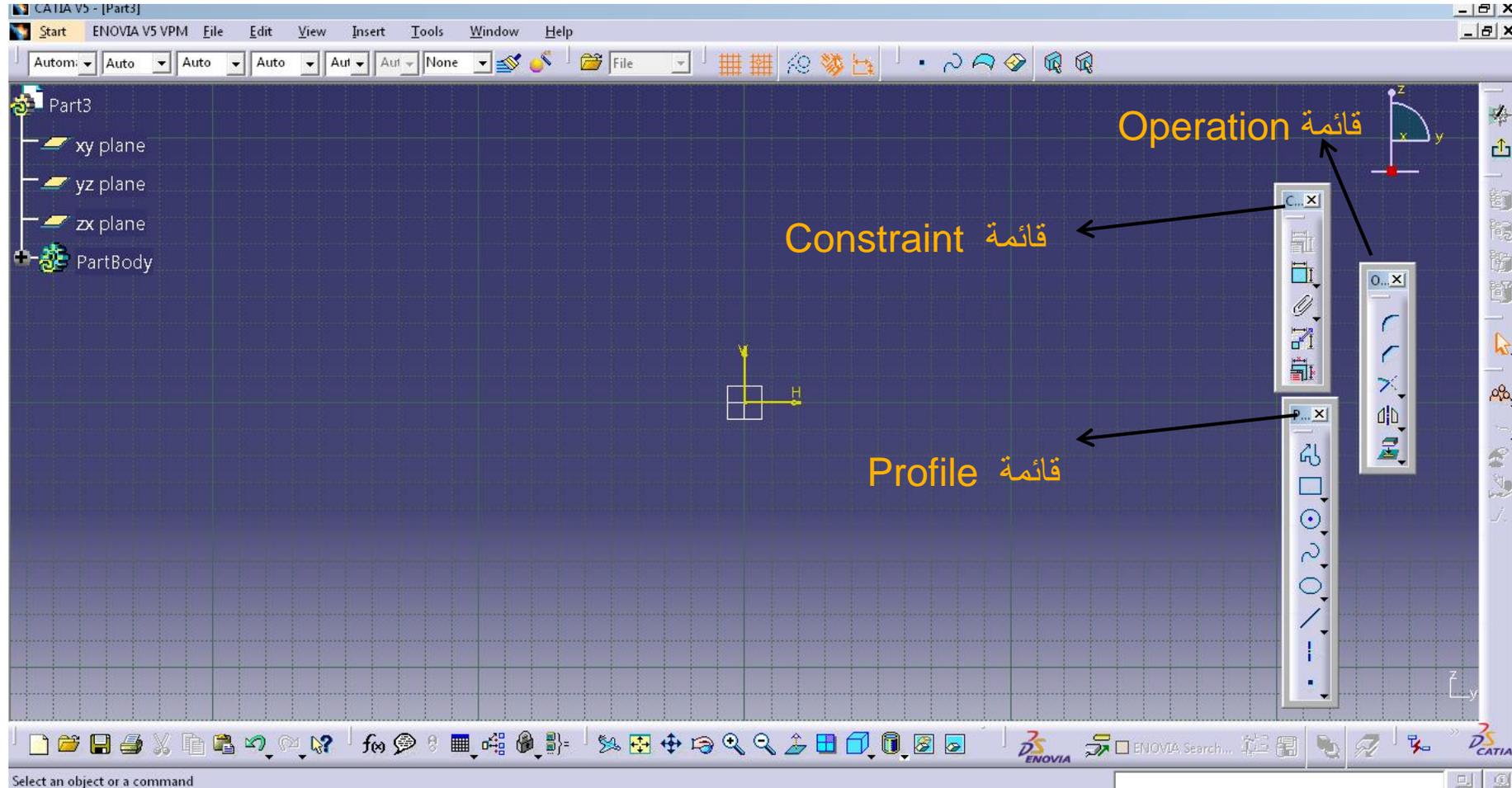


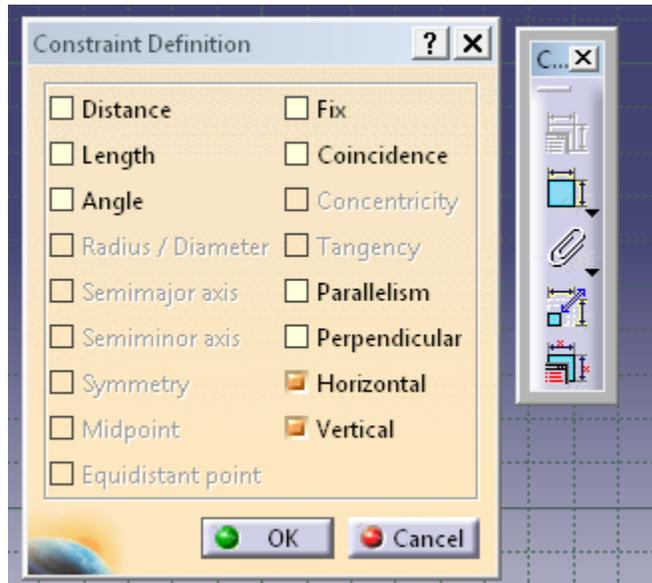
المحاضرة الثالثة

التصميم و التصنيع بمساعدة الحاسب



في البيئة ثنائية البعد سوف نهتم بثلاث قوائم رئيسية



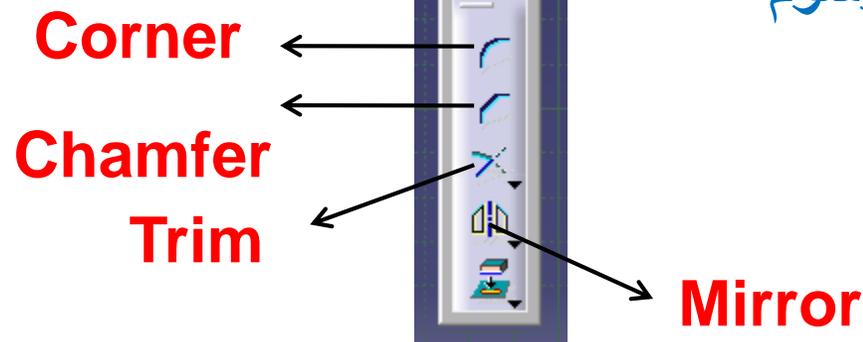


قائمة Constraint

هدف الأوامر الموجودة في هذه القائمة هو وضع القيود من أبعاد و زوايا و قيود توازي و تعامد و تماس على الشكل الهندسي

قائمة Operation

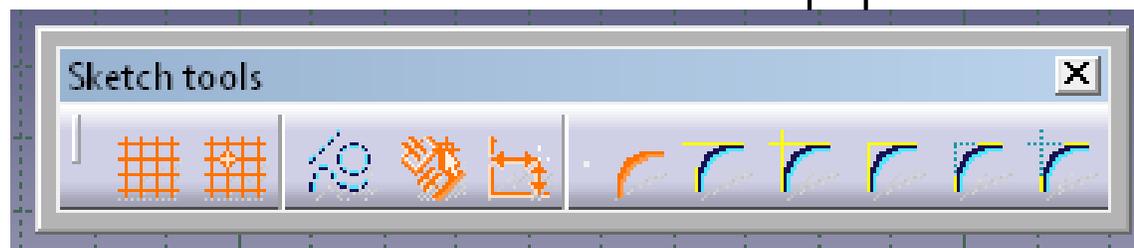
هدف الأوامر الموجودة في هذه القائمة هو إجراء تعديلات على الشكل الهندسي المرسوم



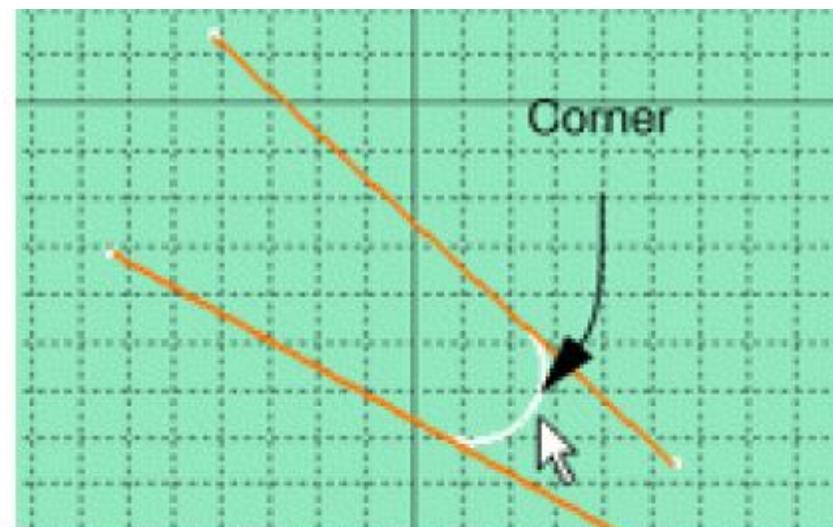
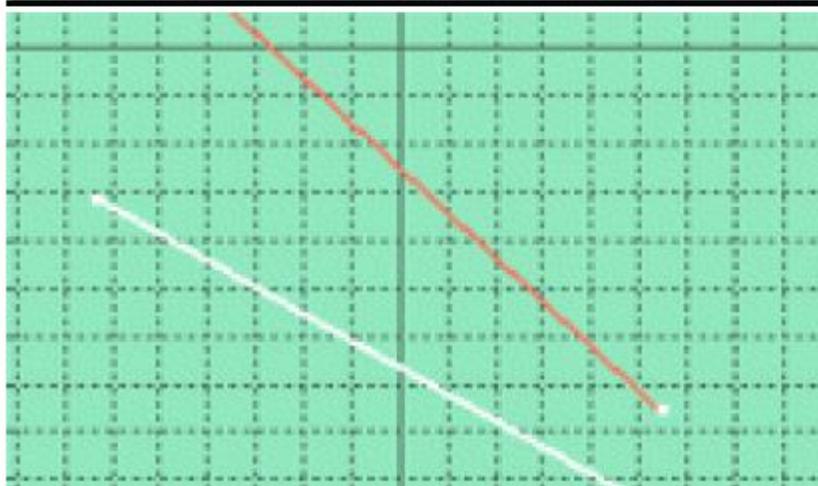
Creating Corners

طرق مختلفة لرسم الزاوية

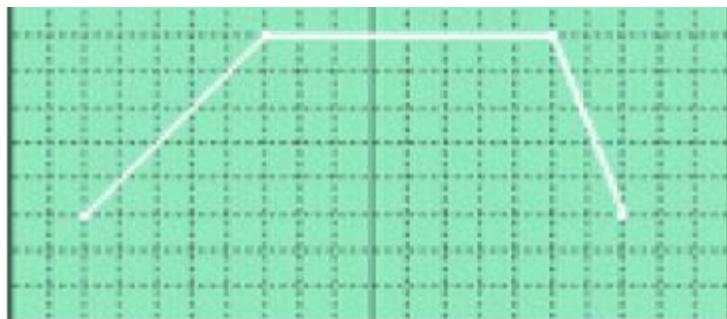
Corner



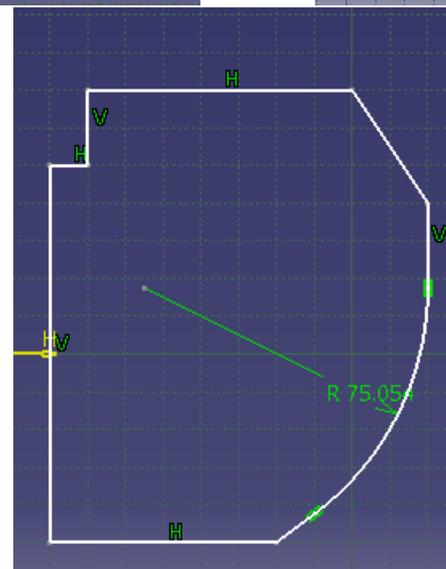
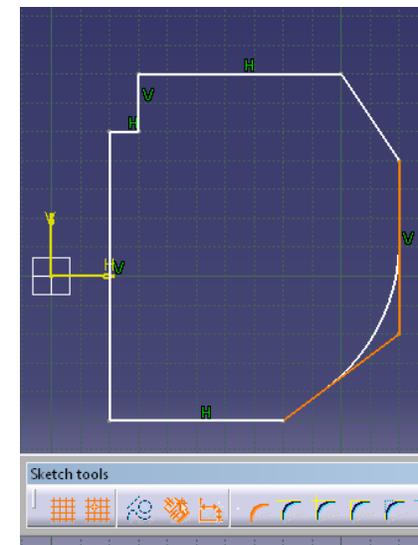
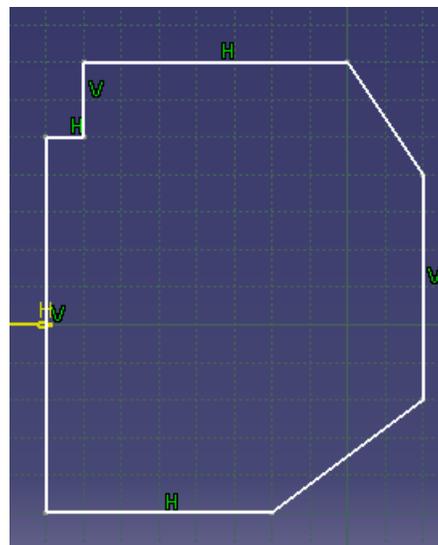
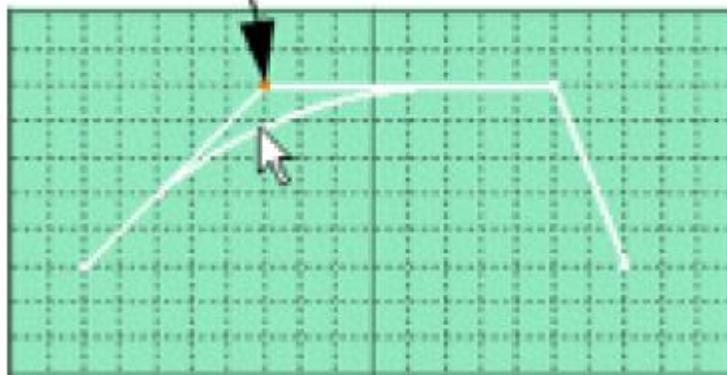
Creating Corners With Both Elements Trimmed



مثال اخر عن استخدام تعليمة Corner



Point

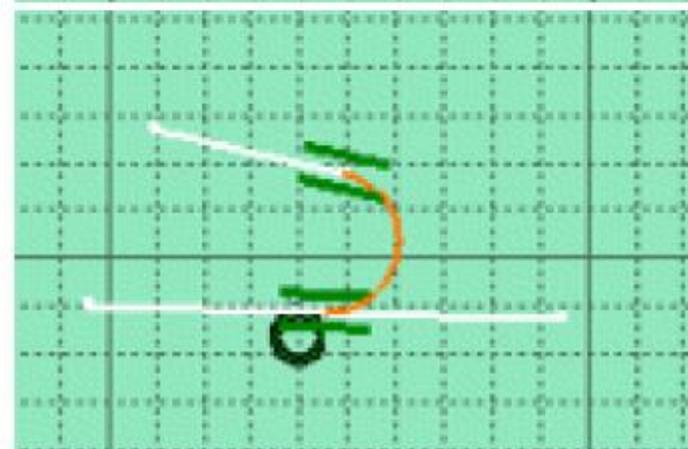
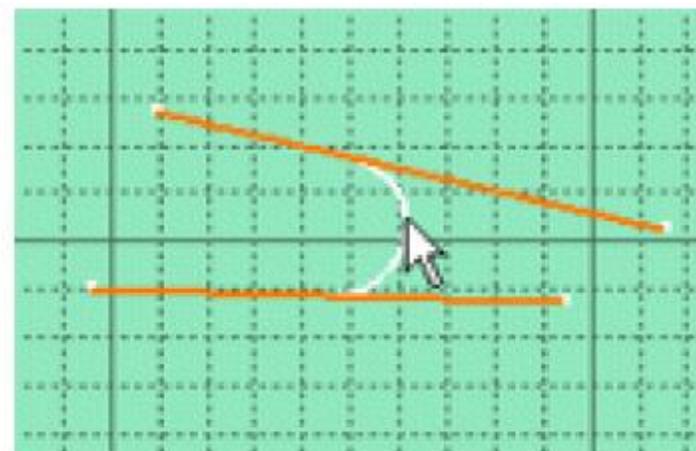
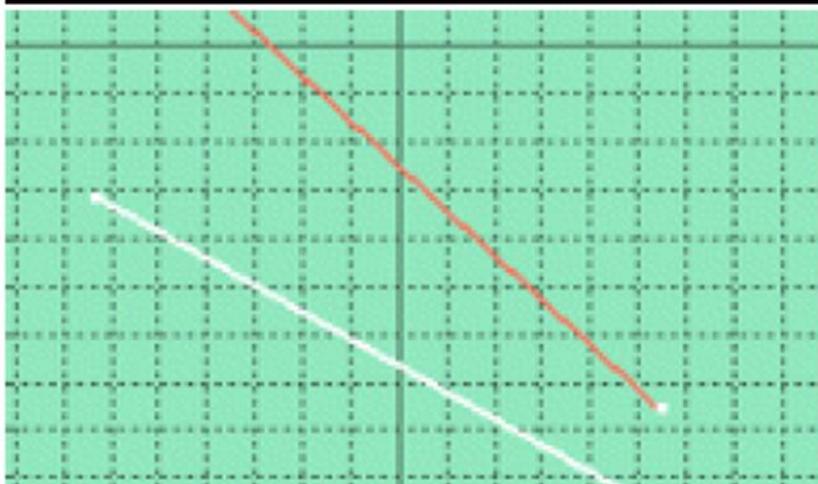
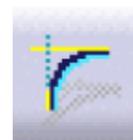


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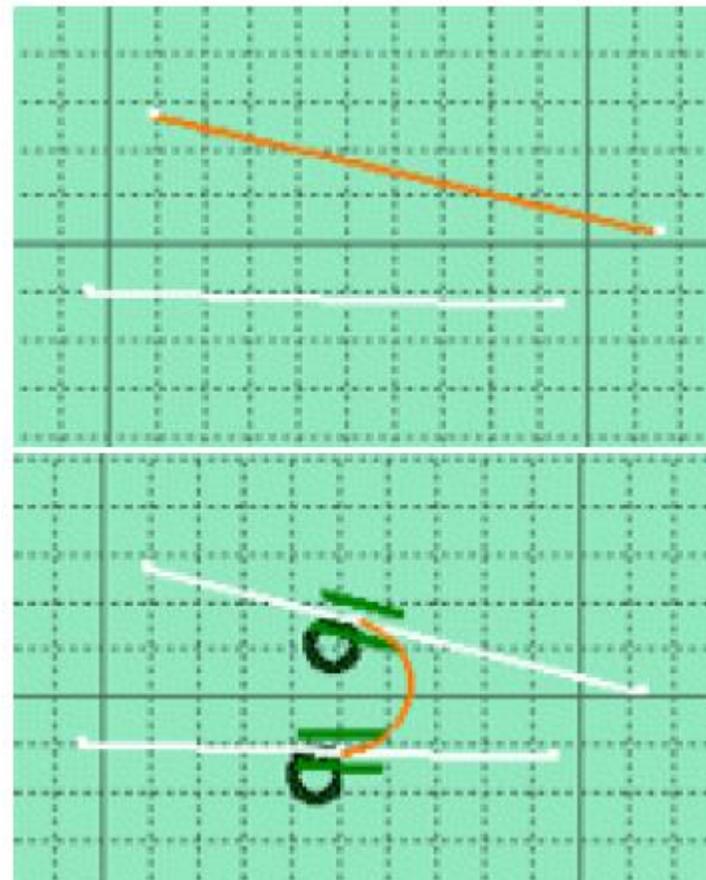
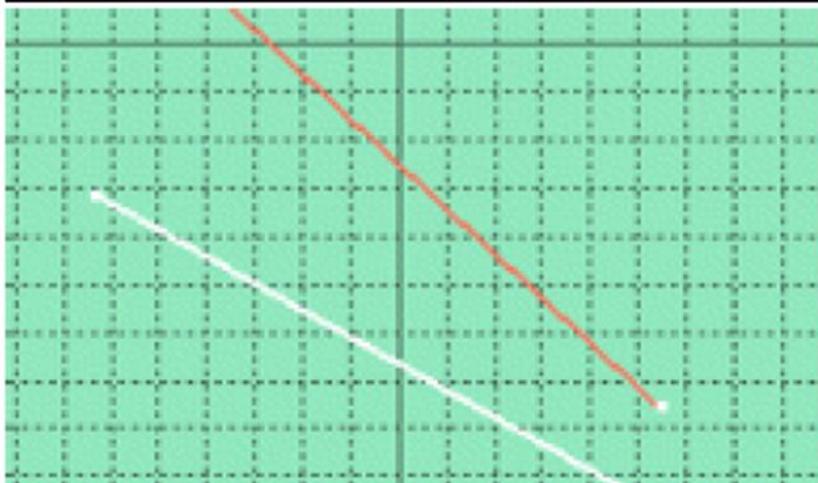
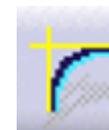
التصميم والتصنيع باستخدام الحاسب

CAD /CAM

Corners with One Element Trimmed



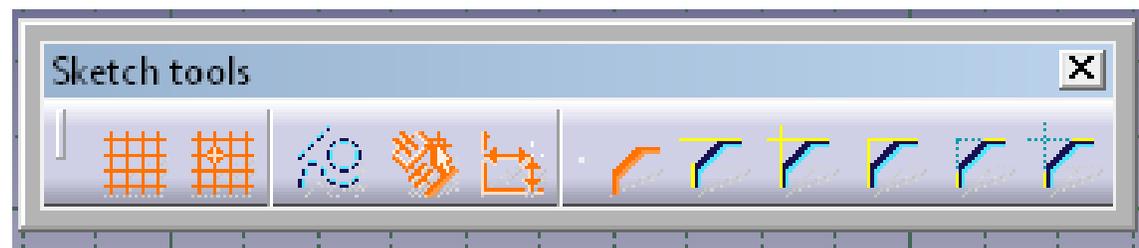
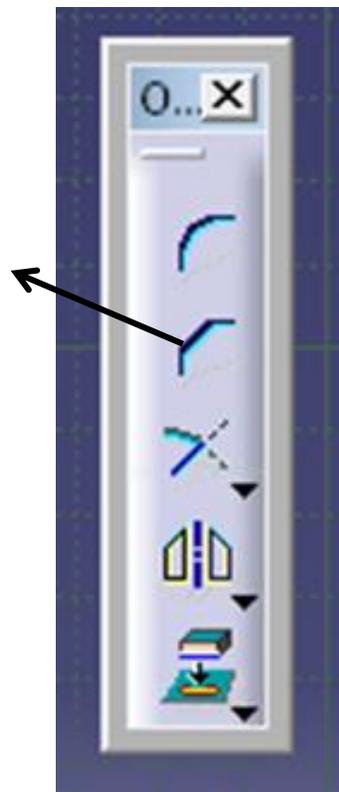
Creating Corners with No Elements Trimmed



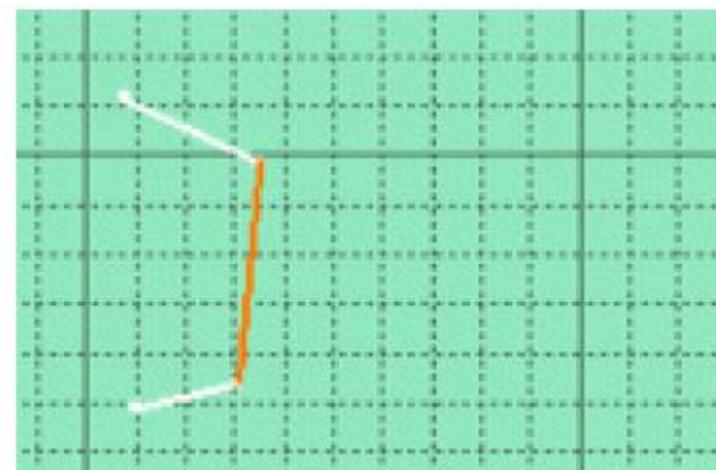
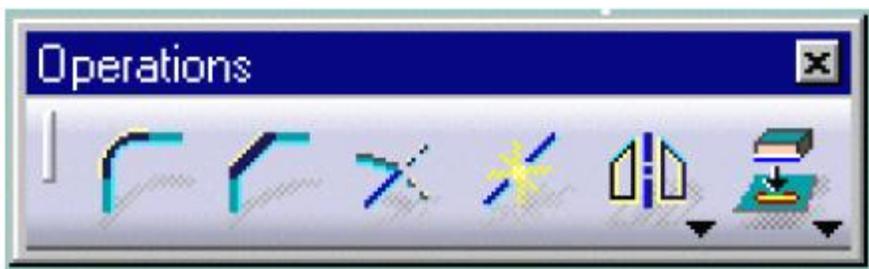
Creating Chamfer

طرق مختلفة لرسم الشطفة

Chamfer

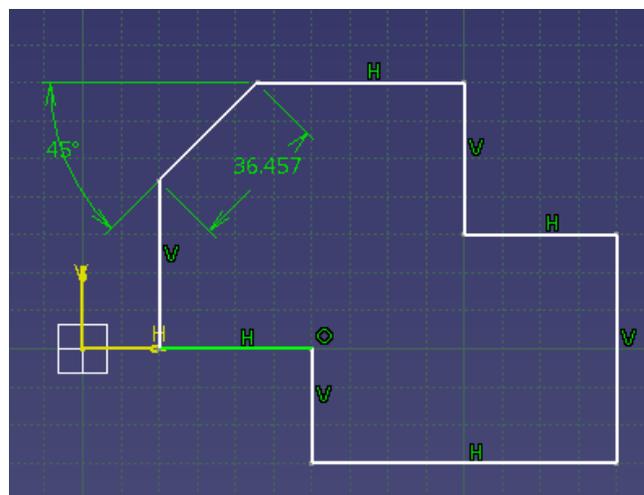
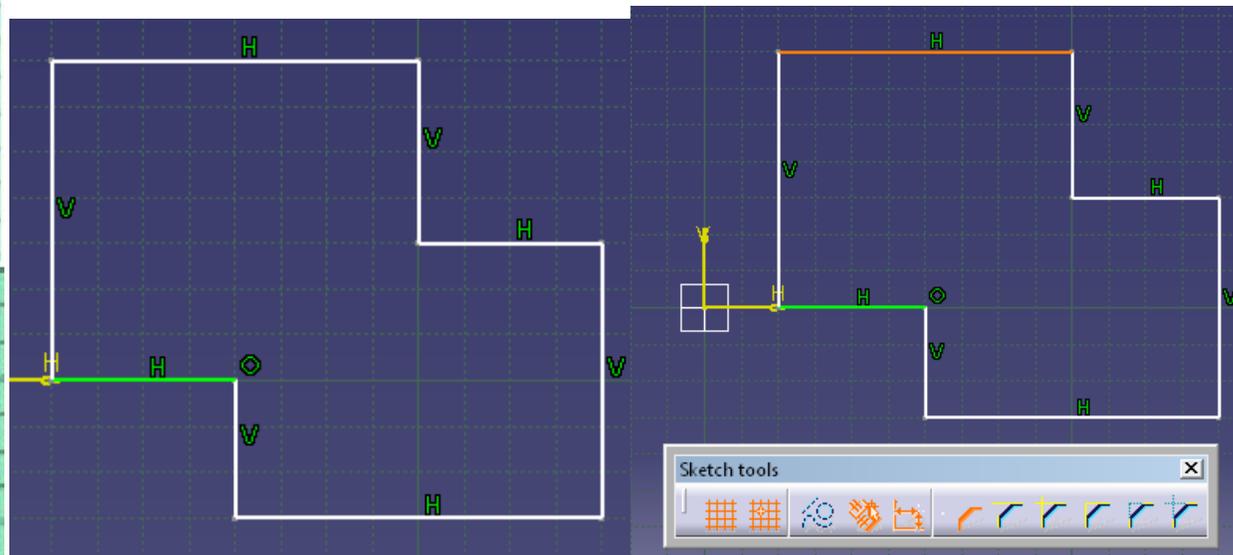
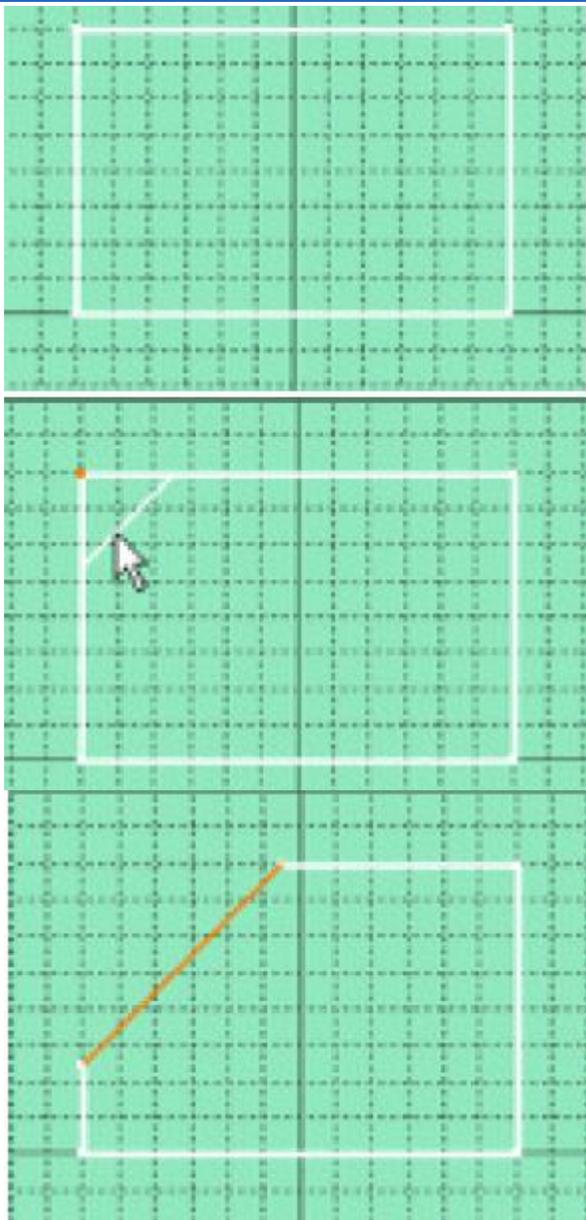


Creating Chamfers With Both Elements Trimmed

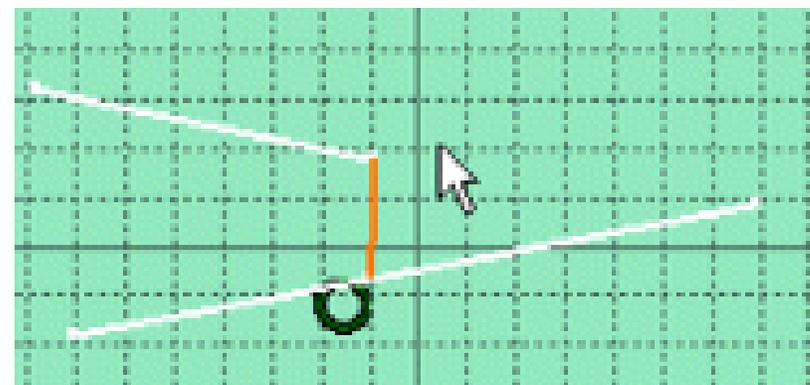
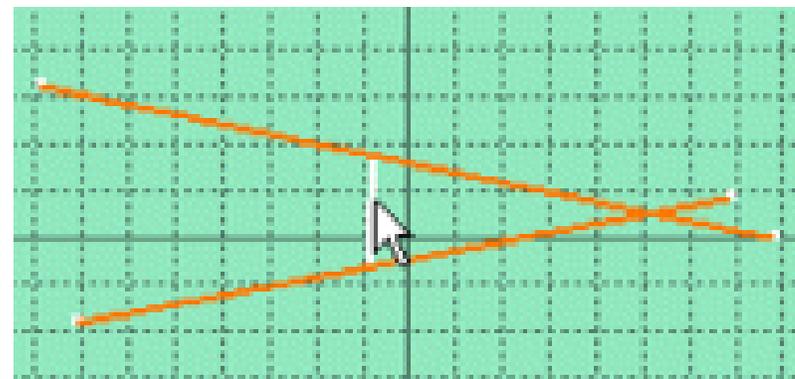
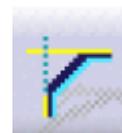


--- رسم

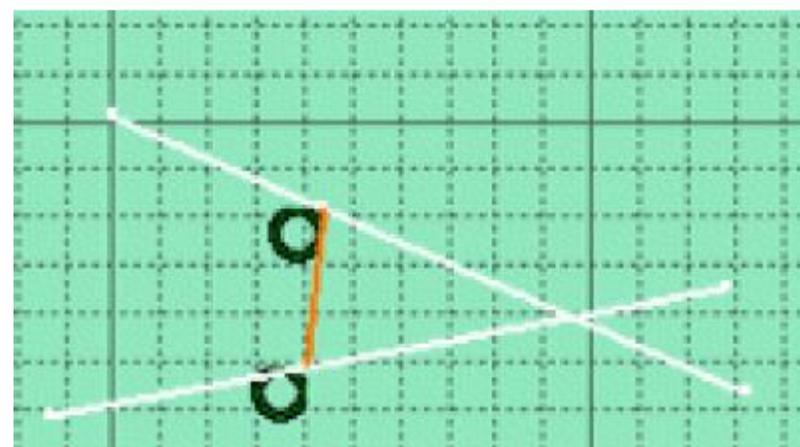
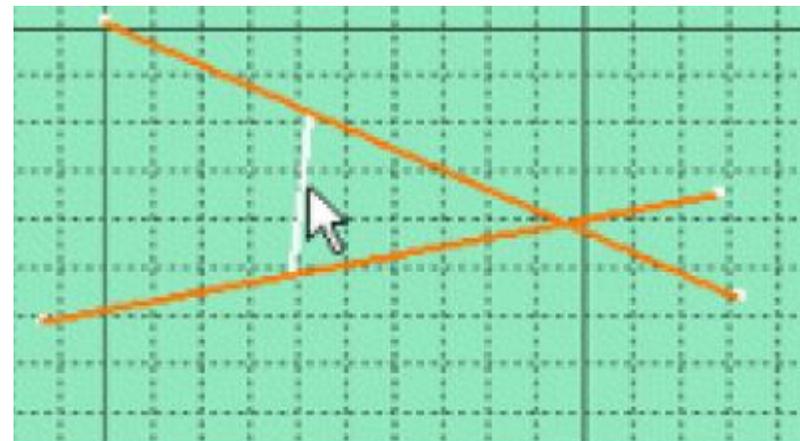
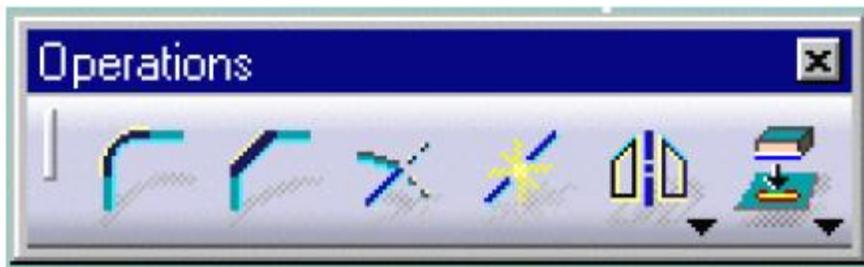
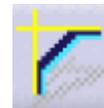
مثال اخر عن استخدام تعليمة Corner



Chamfers with One Element Trimmed



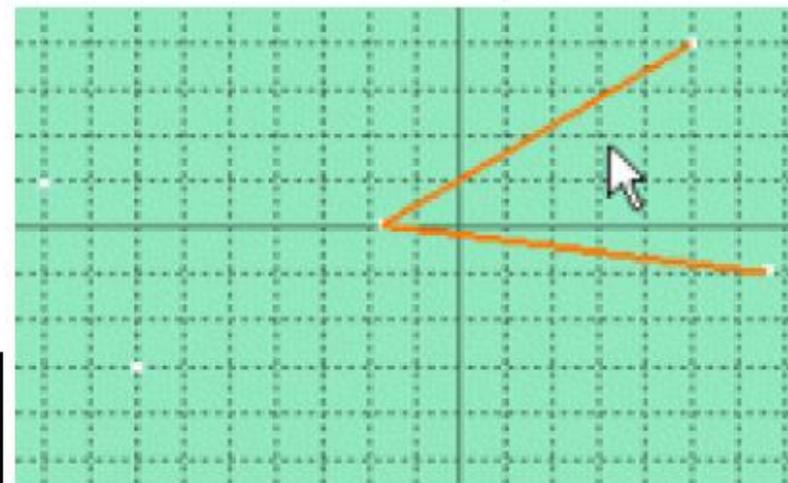
Chamfers with No Elements Trimmed



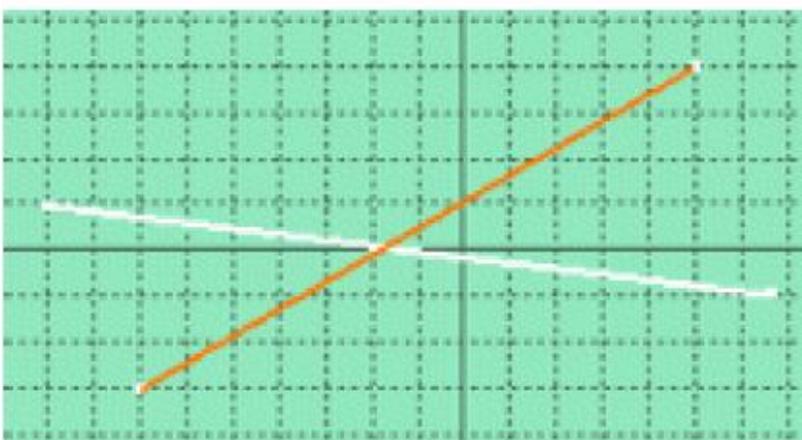
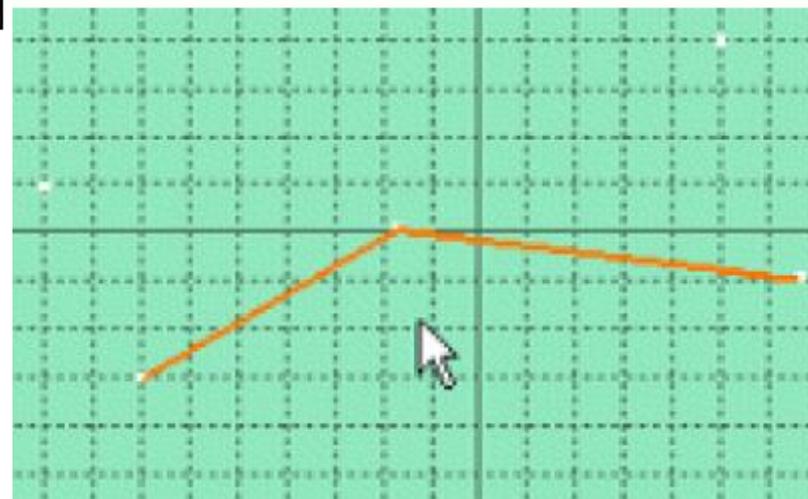
Trimming Elements



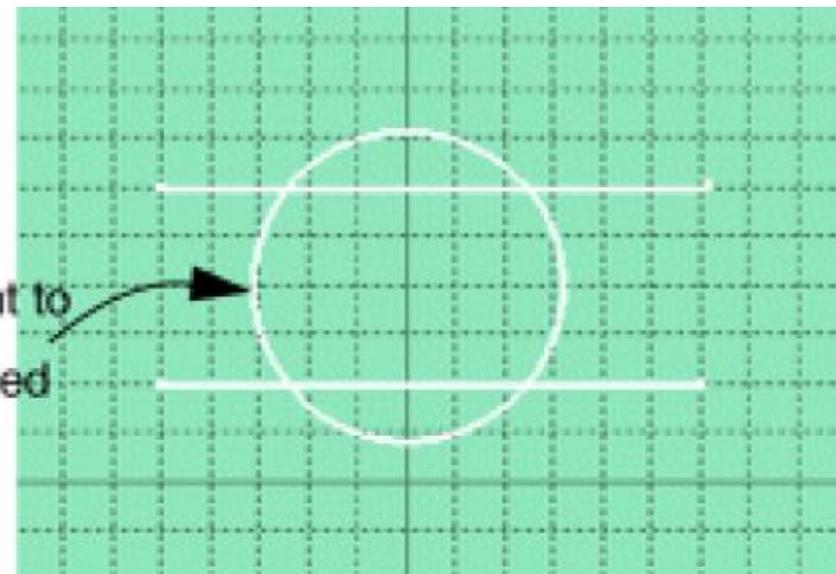
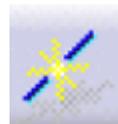
First example



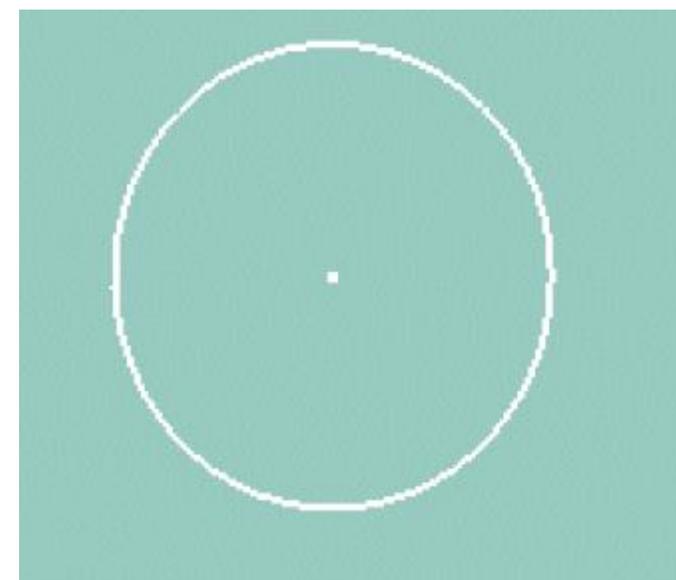
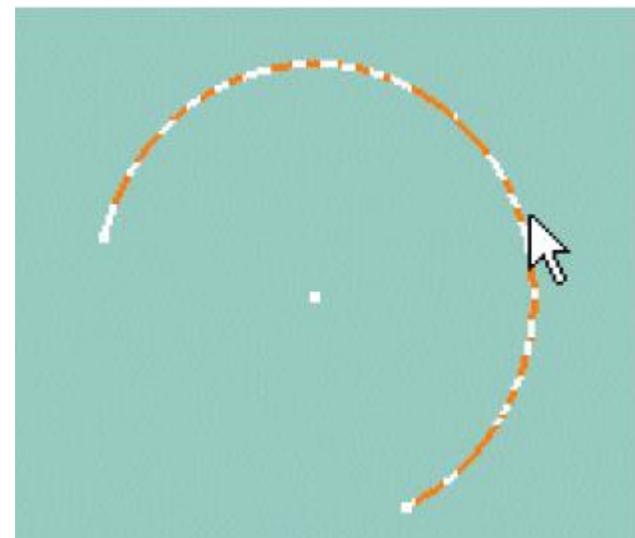
Second example



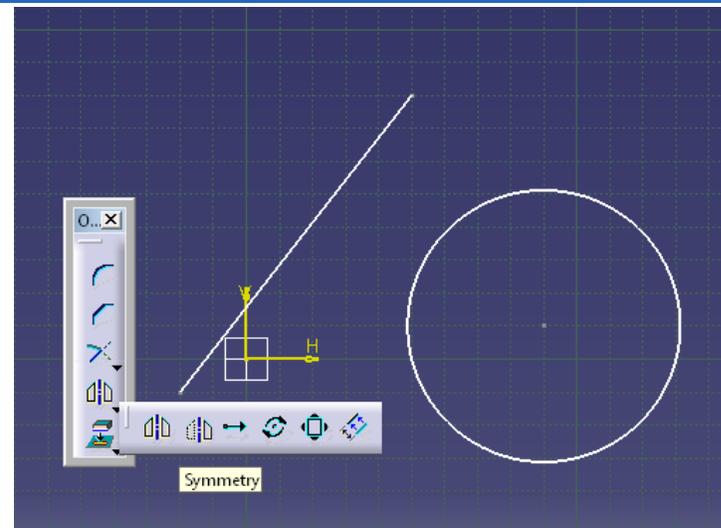
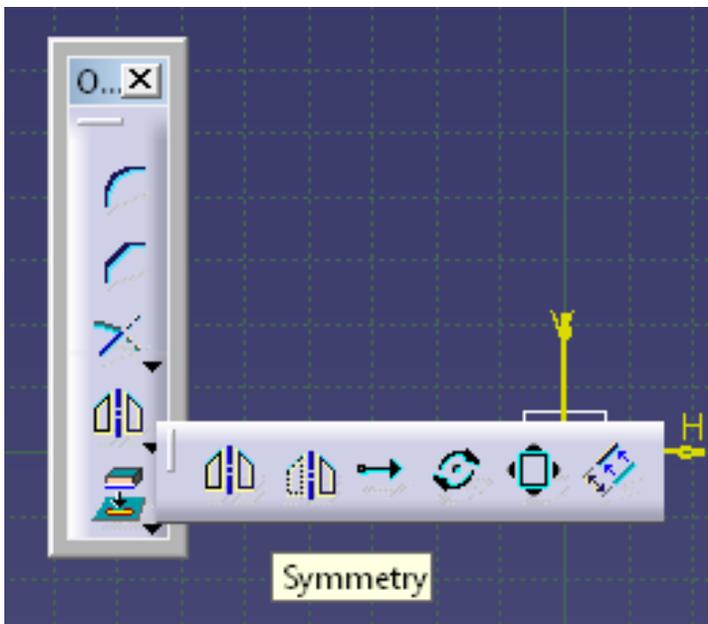
Breaking and Trimming



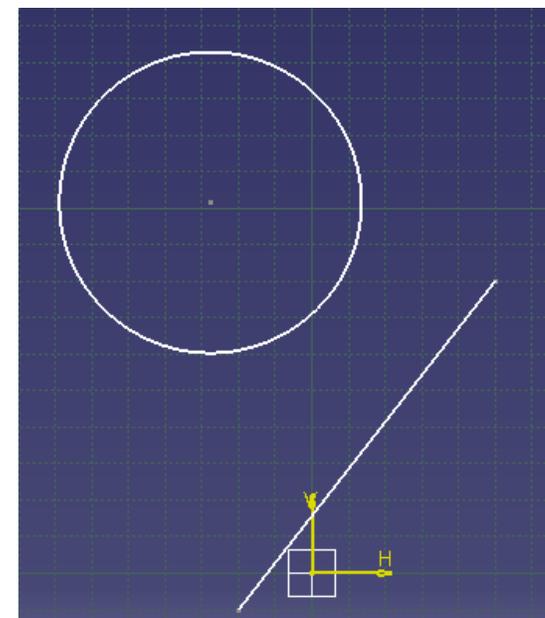
Closing Elements



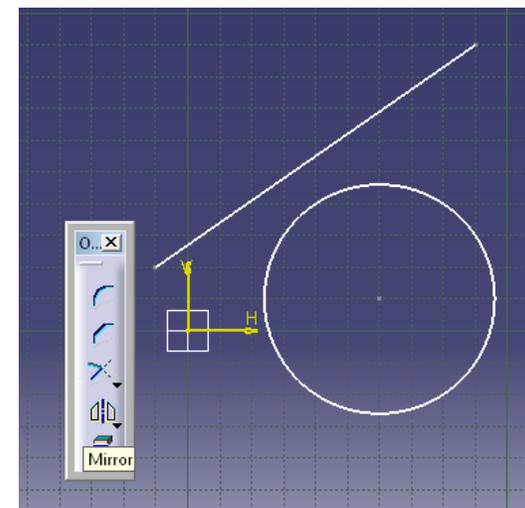
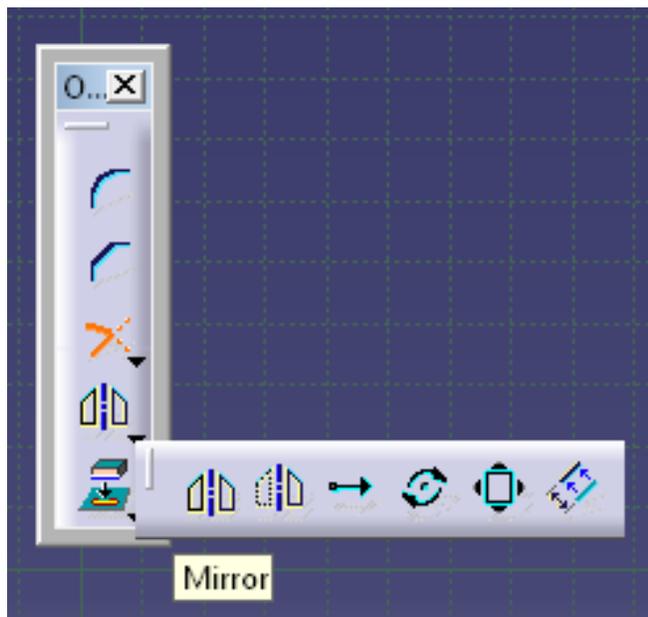
Creating Symmetrical Elements



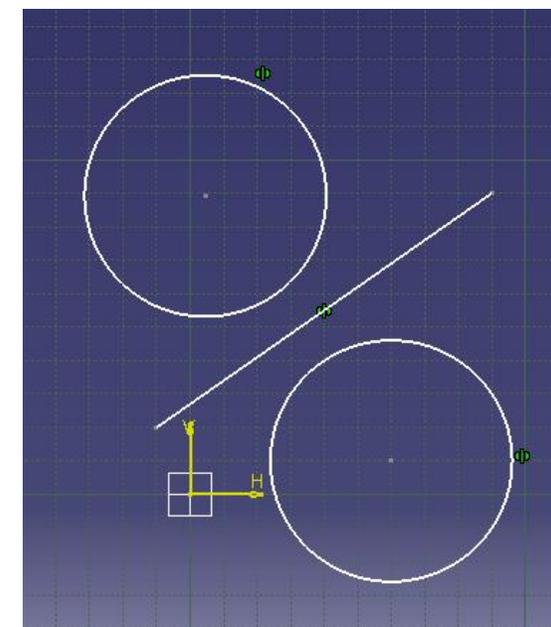
Symmetry



Creating Mirror Elements

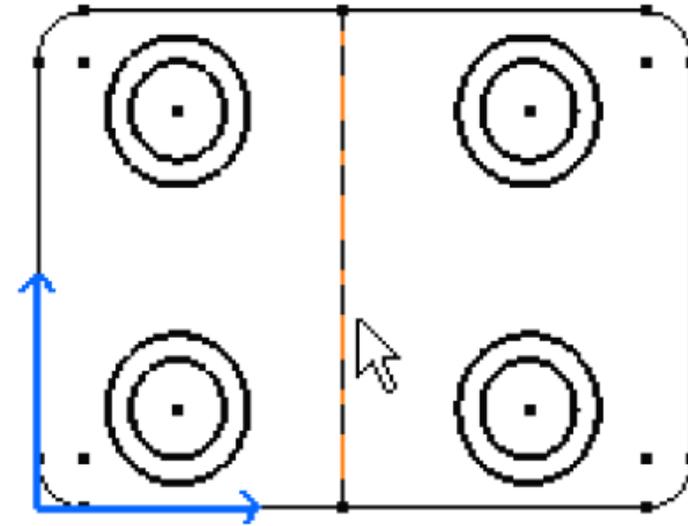
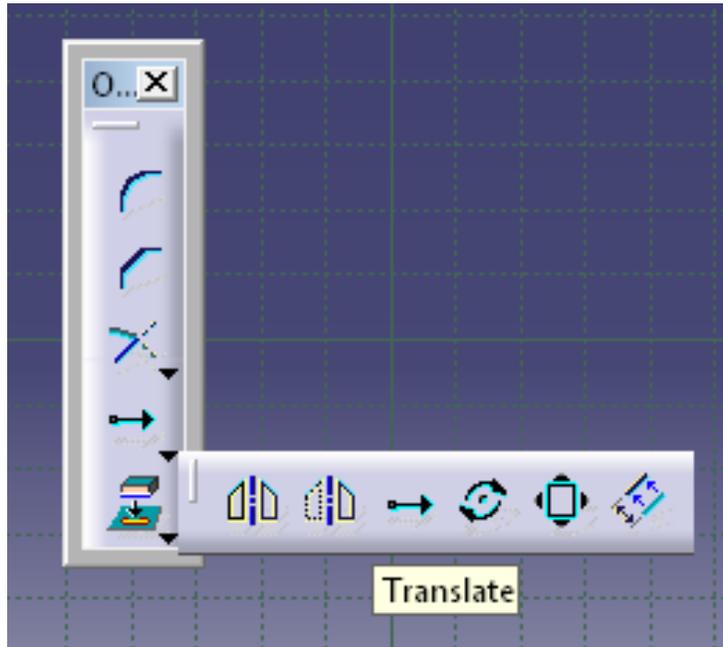
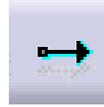


Mirror

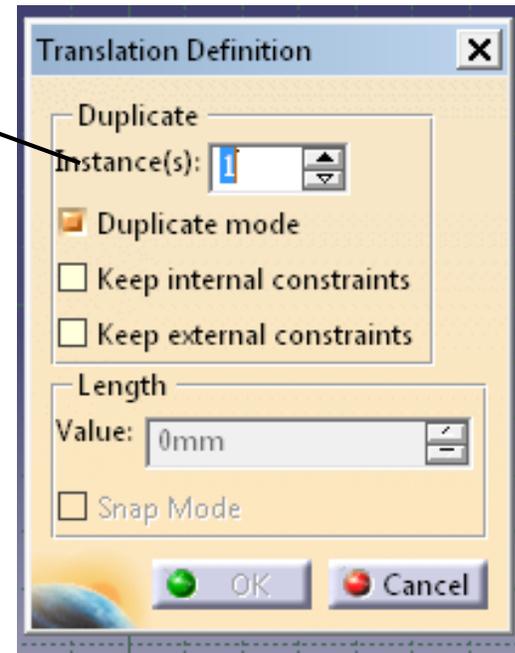


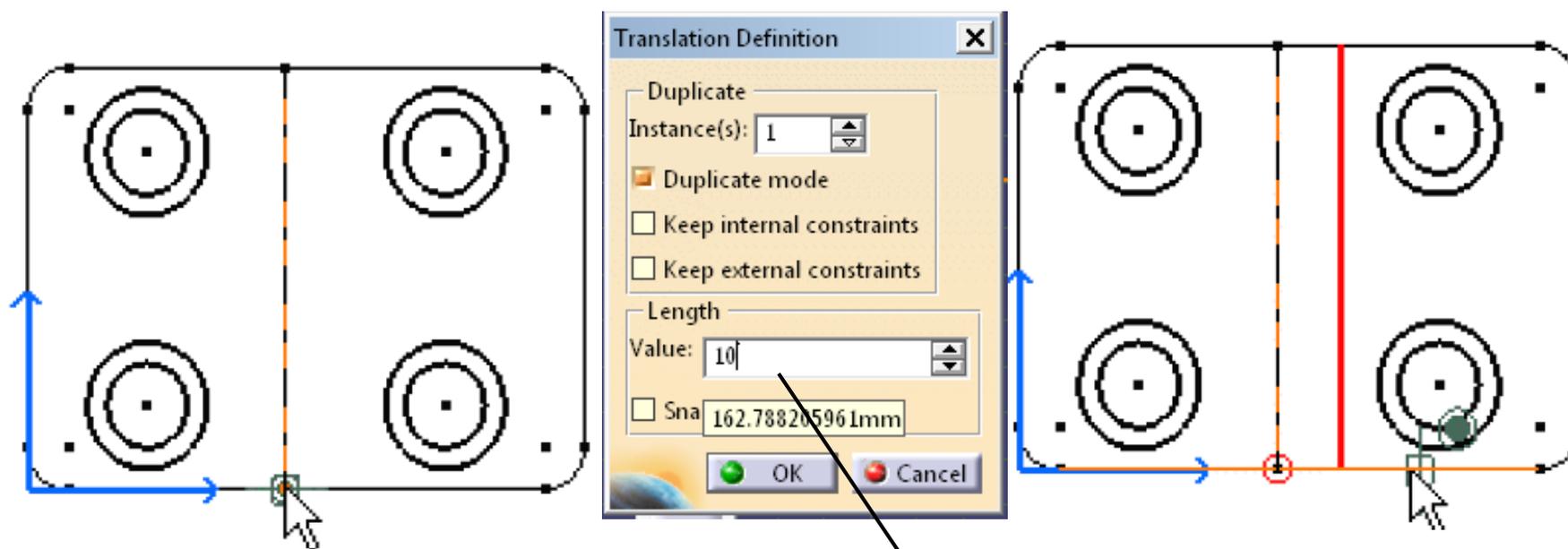
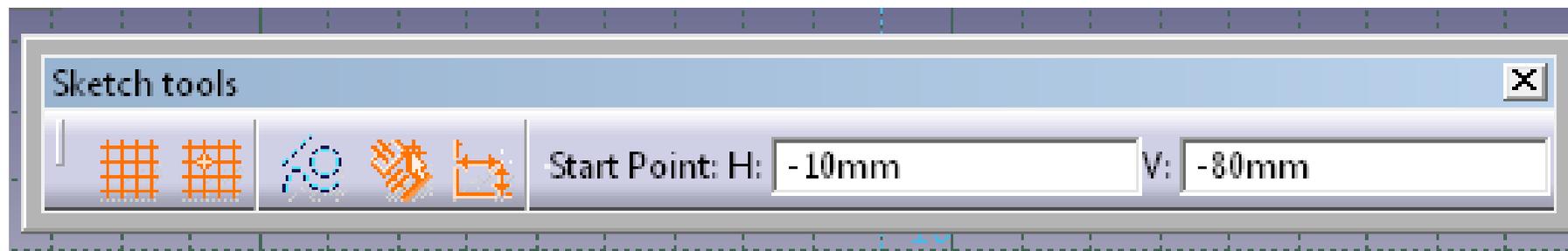
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Translating Elements



عدد النسخ

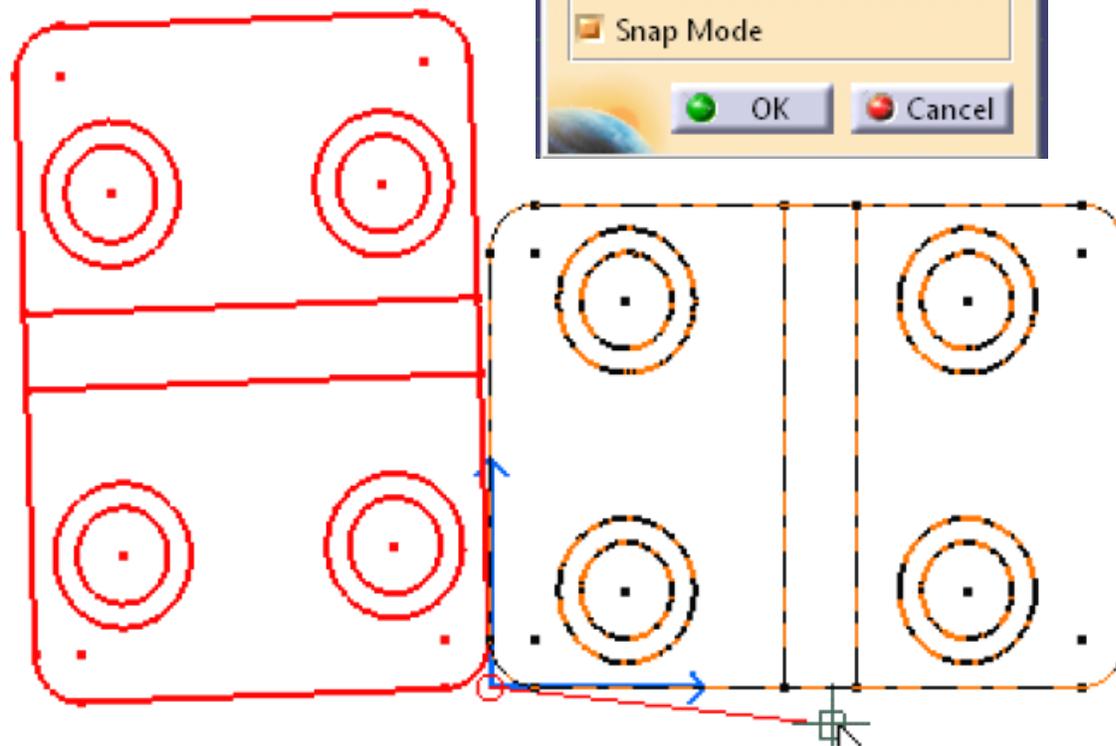
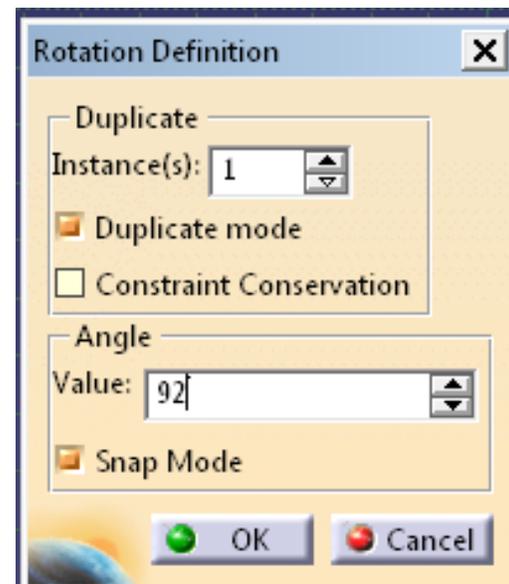
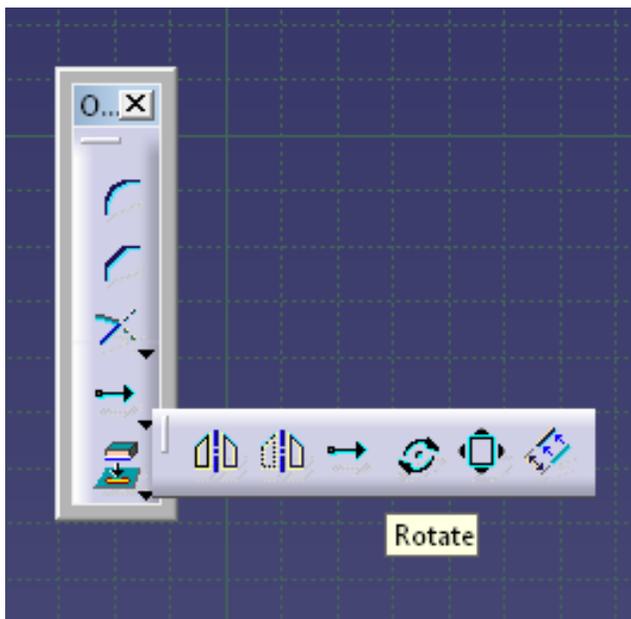




نقطة البداية

مسافة الانتقال

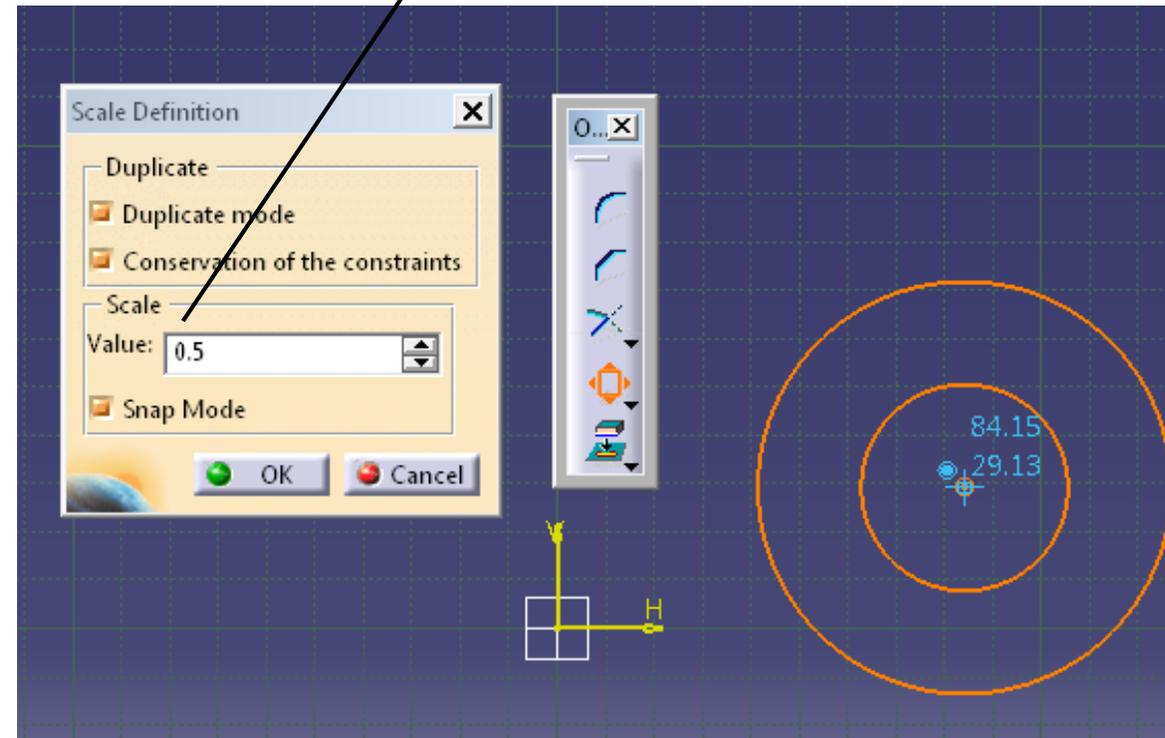
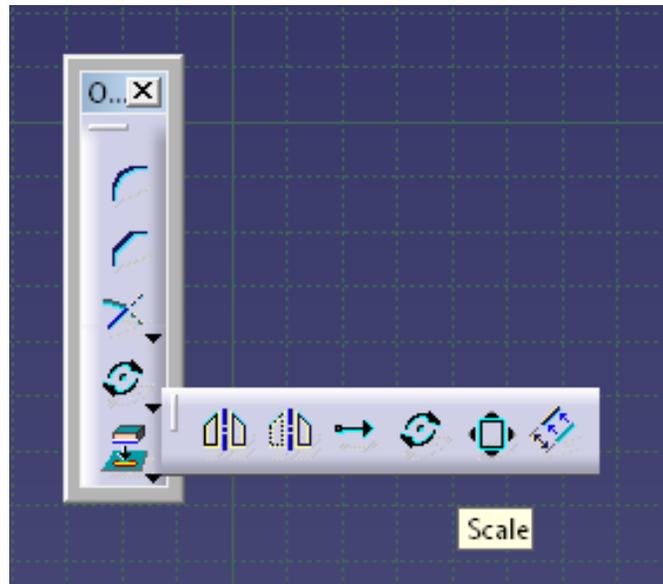
Rotating Elements



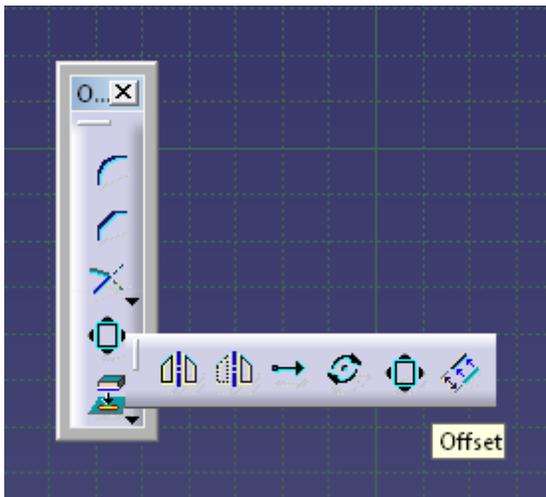
Scaling Elements



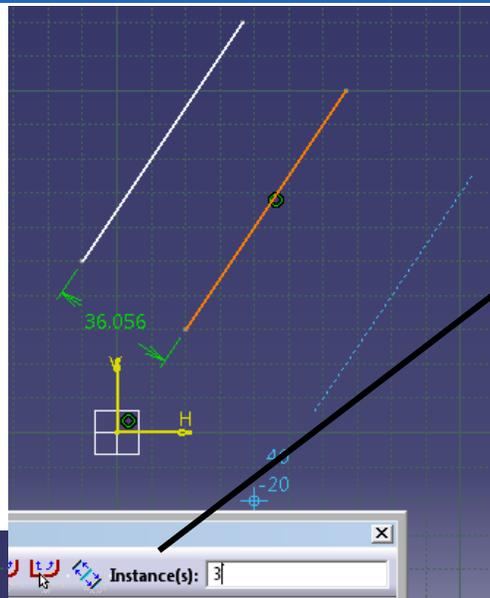
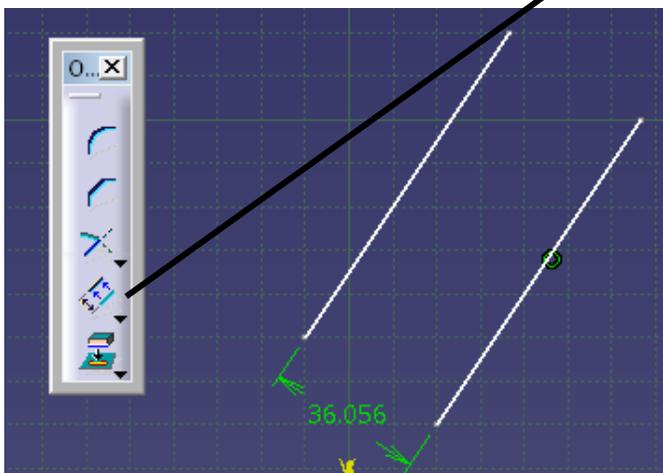
نسبة التكبير أو التصغير



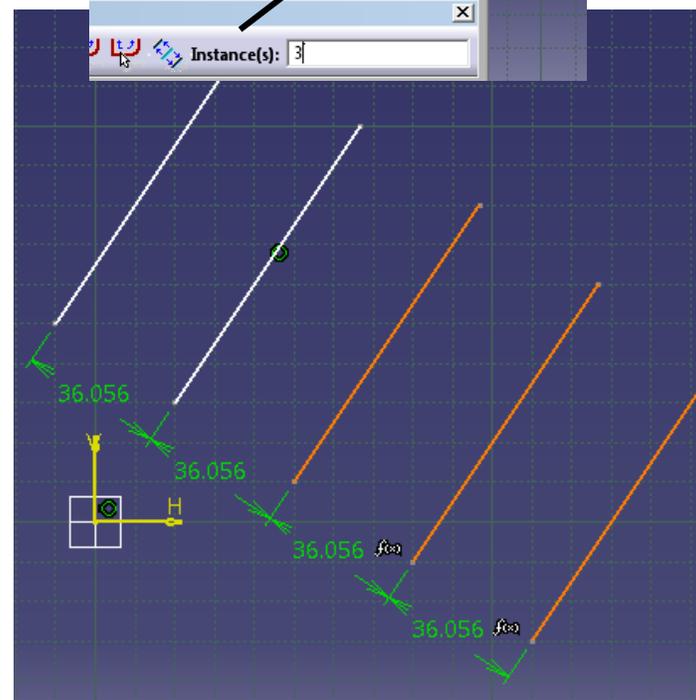
Offsetting Elements



offset



عدد النسخ



CAD /CAM

التصميم والتصنيع باستخدام الحاسب

د. تمام سلوم